

Comparisons of Job Characteristics

Focus Occupation: [Hydrologists \(19-2043\)](#)

Associated Occupation: [Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary \(25-1051\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 82

Focus Occupation: Hydrologists (19-2043)

Associated Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mathematics	9.2	22.1	17.7	<<	Extensive education and/or training may be required
Education and Training	9.2	21.6	10.7	<<	Extensive education and/or training may be required
Physics	4.3	21.0	15.7	<<	Extensive education and/or training may be required
English Language	11.2	20.3	16.0	<<	Extensive education and/or training may be required
Geography	3.9	17.2	16.7	0	Current knowledge level may be sufficient
Computers and Electronics	8.4	16.3	13.5	<	Expanded education and/or training may be required
Chemistry	4.8	15.0	15.6	0	Current knowledge level may be sufficient
Engineering and Technology	5.7	12.8	17.4	>>	Current knowledge level is likely more than sufficient
Biology	3.7	11.6	13.6	>	Current knowledge level is likely sufficient
Communications and Media	5.3	10.2	7.8	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 83

Focus Occupation: Hydrologists (19-2043)

Associated Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
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Speaking	10.8	18.3	12.6	<<	Extensive development of skills in this area may be required
Reading Comprehension	10.7	16.5	13.9	<	A higher skill level may be required
Writing	9.2	15.9	12.0	<<	Extensive development of skills in this area may be required
Active Listening	11.0	14.9	12.6	<	A higher skill level may be required
Instructing	7.8	14.5	8.6	<<	Extensive development of skills in this area may be required
Learning Strategies	7.2	14.4	9.1	<<	Extensive development of skills in this area may be required
Active Learning	8.7	13.6	12.2	<	A higher skill level may be required
Complex Problem Solving	9.1	12.6	11.9	0	Current skill level may be sufficient
Science	4.5	11.9	13.0	0	Current skill level may be sufficient
Systems Analysis	6.5	10.1	9.9	0	Current skill level may be sufficient
Systems Evaluation	6.4	9.9	8.9	<	A higher skill level may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 88			
Focus Occupation: Hydrologists (19-2043)					
Associated Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Oral Expression	12.4	19.2	13.6	<<	Extensive improvement in abilities may be required
Written Expression	9.8	17.5	14.1	<<	Extensive improvement in abilities may be required
Oral Comprehension	12.5	17.1	14.2	<	Some improvement in abilities may be required
Written Comprehension	11.0	16.7	14.6	<	Some improvement in abilities may be required
Speech Clarity	10.2	16.5	10.5	<<	Extensive improvement in abilities may be required
Inductive Reasoning	10.2	14.1	14.6	0	Current ability level may be sufficient
Deductive Reasoning	10.6	13.8	13.4	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	10.0	13.8	>>	Current ability level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 95
<div>Focus Occupation: Hydrologists (19-2043)</div> <div>Associated Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051)</div>		

Work Activities	Exclusivity of Activity
Advise governmental or industrial personnel	28
Analyze geological research data	87
Analyze scientific research data or investigative findings	27
Conduct field research or investigative studies	52
Conduct laboratory research or experiments	57
Direct and coordinate scientific research or investigative studies	27
Interpret aerial photographs	69
Perform statistical analysis in physical science or geological research	71
Present research papers or dissertations on physical science issues	78
Use geographical information system (GIS) software	72
Use knowledge of tides and currents	92
Use library or online Internet research techniques	21
Use measuring instruments to collect geological data	89
Use physical science research techniques	68
Use quantitative research methods	35
Use teaching techniques	29
Write research or project grant proposals	33
Write scholarly or technical research papers	36

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: n/a

Focus Occupation: Hydrologists (19-2043)

Associated Occupation: Atmospheric, Earth, Marine, and Space Sciences Teachers, Postsecondary (25-1051)

Tools and Technologies	Exclusivity
Tools and technology data is unavailable for one or both occupations.	

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.